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# After-hours primary care

After-hours primary care has the potential to improve consumer access to services and reduce the burden on hospital emergency departments.

This *RESEARCH ROUNDup* outlines the function of five models of after-hours service provision, discusses Australian examples of after-hours services and presents information regarding each model's effectiveness and shortcomings.

## Introduction

In response to increasing demand for after-hours primary care<sup>1,2</sup> financial considerations and changes in practitioners' attitudes, the provision and organisation of after-hours primary care services has undergone numerous changes in recent years.<sup>3</sup> Compared to other countries, including Canada, New Zealand and United Kingdom, Australian general practitioners were more likely to offer after-hours care to patients.<sup>4</sup> Although Australian patients reported difficulties with securing same-day appointments for after-hours consultations, the majority could easily reach their doctor by telephone, providing a potential alternative to visits.<sup>5</sup> Currently, there are five main models of after-hours care provision that may be used alone or in various combinations.<sup>3</sup>

## Practice-based services

This model of after-hours service delivery relies on general practitioners providing after-hours care to their own patients within their regular practice.<sup>3</sup> While patients have reported high levels of satisfaction with continuity and quality of care provided, Australian general practitioners, particularly those located in small and isolated practices, have reported feeling at risk of violence when providing after-hours care, particularly if there was an expectation for home visitation.<sup>6</sup> As a result, GPs either limited their provision of after-hours care and home visitation, or expressed a preference for providing out-of-hours care in co-operatives or emergency departments, where other doctors and support staff are located within the same building.<sup>6</sup>

## Deputising services

Deputising services are commercial companies, which employ doctors specifically for the purpose of after-hours care provision.<sup>3</sup> Overall, deputising service patients were less satisfied with the waiting time for telephone consultations and home visits compared to those using practice-based services.<sup>7,8</sup> Similarly, deputising doctors reported lower levels of satisfaction with after-hours care arrangements compared to their cooperative counterparts,<sup>3</sup> which could reflect safety concerns and system inefficiency. There is some evidence to suggest

that deputising doctors may prescribe less appropriately than GPs from practice-based or cooperative services;<sup>3</sup> however, the reasons behind this trend are unclear.

## Emergency departments

In the absence of a dedicated after-hours primary care service, patients use hospital emergency departments.<sup>2,3,9</sup> General practitioners may provide after-hours services to their patients from emergency departments rather than from their regular practice, particularly in rural and remote locations.<sup>10</sup> A randomised controlled trial, which compared the services provided in emergency departments by general practitioners and emergency staff, found that GPs safely managed non-emergency attendees in the emergency department, while using fewer resources than usual staff.<sup>11</sup> Furthermore, there were no differences in patient satisfaction between those attended by GPs and those seen by emergency staff.<sup>11</sup> However, there appear to be few benefits for the emergency departments at which these services are offered, as the number of emergency patients who can be treated by general practitioners are typically low, thereby having minimal impact on the workload of emergency department staff.<sup>10,12</sup>

## Cooperatives

Cooperatives involve general practitioners from a number of different practices forming a non-profit making organisation to provide care for their patients after hours.<sup>2,3</sup> Patients who receive care at these centres are referred back to their usual GP for ongoing monitoring.<sup>2</sup> Many cooperatives utilise telephone triage and have low home visitation rates, which contribute to a reduction in the immediate medical workload.<sup>3</sup> Overall, general practitioners and patients report being satisfied with these arrangements.<sup>2,7</sup> An Australian study which evaluated the impact of a GP cooperative found increased consumer acceptability and affordability following the introduction of

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the service,<sup>13</sup> reflecting overall patient satisfaction. However, the lack of a home visitation service has been identified as an important barrier to the provision of care for older patients and families with young children.<sup>2</sup>

## Telephone triage and advice services

Telephone services, typically operated by nurses, are promoted in place of face-to-face after-hours consultations.<sup>3,14</sup> These services provide advice to patients, taking into account their symptoms and the severity of illness. A systematic review of telephone triage services has shown that they have the potential to reduce immediate medical workload,<sup>3</sup> particularly when the service is provided by nurse practitioners.<sup>15</sup> It was found that nurses are able to effectively manage a high proportion of calls, without an increase in the number of patients attending the practice within the next three days.<sup>15</sup> However, patients frequently reported being dissatisfied with telephone consultations<sup>3,7</sup> particularly when patients expected a face-to-face consult, but received telephone advice instead.<sup>8</sup> Indeed, another study showed that patients receiving telephone consultations reported increased need for further information and additional assistance during the week following their initial consultation.<sup>7</sup>

It is likely that location and availability of other services have an impact on patient satisfaction. An Australian study found that rural palliative care patients and their families reported increased sense of security and lower sense of isolation after the introduction of an after-hours telephone support service.<sup>16</sup> There was some anecdotal evidence that the service contributed to a reduction in hospital admissions.<sup>16</sup> On the other hand, another Australian study evaluating the impact of nurse-staffed call centres found that these services did not lead to an improvement in after-hours care accessibility among consumers.<sup>13</sup>

The evidence suggests that patient satisfaction was strongly influenced by their expectation for either telephone advice or a home visit. Patients were more satisfied with the care provided to them if their original expectations were met.<sup>8</sup> General practitioner and nurse satisfaction is likely to be influenced by service organisation and care provision. An Australian study has demonstrated that doctors and nurses reported higher levels of satisfaction when timely patient information was readily available to them and communication between health professionals was streamlined.<sup>17</sup> Further research is required to establish which factors contribute to successful telephone triage services.

## Conclusion

Recent studies suggest that general practitioner and patient satisfaction with after-hours services is closely related to personal characteristics, the model of care provision, outcomes and personal expectations.<sup>8</sup> Geographical location and population characteristics are likely to have a strong influence on the model of after-hours care that is deemed most appropriate. For example, lack of access to transport and low affordability of care may contribute to poor after-hours care accessibility, particularly in rural and remote areas.<sup>18,19</sup> These characteristics and available resources need to be taken into account in order to establish an accessible and acceptable after-hours service.

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